

REMARKS/ARGUMENTS

Claims 1-44 were pending in the present application. The present response amends claims 1, 26, 40, and 42, leaving pending in the application claims 1-44. Reconsideration of the rejected claims is respectfully requested.

The Office Action of March 17, 2004, failed to specify whether the Office Action was a FINAL or non-final action. The PAIR system indicated that the action is final, so this response is being submitted in a timely fashion to provoke an advisory action if appropriate. If this assumption is untrue, Applicants respectfully request clarification from the Examiner.

I. Rejection under 35 U.S.C. §112

Claims 1-44 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Particularly, the Office Action states on page 3 that in the previous rejection “what was taken as an acknowledgement of prior art was explicitly included in the statement of rejection” and that in the previous response “it is explicitly argued that there is no teaching or suggestion of how a data processor of a wafer process tool can be used to analyze the characteristic signatures of a wafer using a scattering model for a process of the tool” such that the remarks “deny that the known techniques in acknowledge [sic] prior art are sufficient to teach those in the art to make and use the invention...” such that the disclosure is now insufficient.

Applicants respectfully submit that there has been a misunderstanding leading to the mischaracterization of the previous arguments. In the response filed December 15, 2003, the statement regarding the lack of teaching or suggestion of “how a data processor of a wafer process tool can be used to analyze the characteristic signatures of a wafer using a scattering model for a process of the tool” is in the fourth full paragraph of page 10, which is a discussion of the *Sato* reference. A few lines above can be seen that “*Sato* discloses a system” that “is very different from that recited in Applicants’ claim 1. First...” and then “Further, there is no teaching or suggestion...” Thus, the remarks at issue were intended to refer to the *Sato* reference, and not the entire state of the art. The statement in the Office Action of March 17, 2004 on page 4 that “the remarks deny that the known techniques in the acknowledge [sic] prior art are sufficient” is inaccurate. Applicants respectfully apologize for any inadvertent confusion.

As the arguments filed on December 15, 2003, do not in fact deny anything about the acknowledged prior art except that the cited prior art does include all the required limitations of claim 1, Applicants respectfully request that this rejection be withdrawn.

II. Rejection under 35 U.S.C. §103

Claims 1-42 are rejected under 35 U.S.C. §103(a) as being obvious over *Toprac* et al (US 6,304,999) and the acknowledged prior art in view of *Sato* (US 5,766,360) and *Sun* (US 5,940,175).

Independent claims 1, 26, 40, and 42 have been amended to include a limitation similar to that of previously presented claim 44, namely the ability to adjust process parameters for subsequent processing of the same wafer in the wafer process tool based on the measure of the surface or surface features of the wafer. No reference was cited as showing such a limitation.

Toprac does not teach or suggest such a limitation, as *Toprac* teaches performing an adjustment to a model and/or manufacturing tool “between the processing of each semiconductor wafer” or “on a lot-by-lot basis” (col. 5, lines 60-67; col. 6, lines 54-60).

No prior art reference has been cited as showing the adjustment of process parameters for subsequent processing of the same wafer in a wafer process tool, based on measurement of the surface or surface features of the wafer.

Sato does not teach or suggest such a limitation, as *Sato* discloses a system for “measuring and inspecting a thin film,” using a tool such as an ellipsometer to measure film thickness (col. 7, lines 57-66). A determination is made whether the thin film is “defective,” such as where “the growth thin film of the substrate 15 deviates from a predetermined standard” (col. 4, lines 52-57). If a film is determined to be defective, the corresponding wafer can be “removed from the process” if possible, or, if the wafer cannot be removed, “processing can be continued” (col. 5, lines 4-14). There is no teaching or suggestion that parameters for subsequent processing of the same wafer can be adjusted based on that inspection. *Sato* therefore cannot render the independent claims obvious, either alone or in any combination with *Toprac* and the acknowledged prior art.

Sun is cited as showing a “means of accessing any point on the wafer” (OA p. 6). The accessing means of *Sun* does not make up for the deficiencies in the acknowledged prior art, *Toprac*, and *Sato*. As such, *Sun* cannot render Applicants’ independent claims 1, 26, 40, 42, 43,

and 44 obvious, either alone or in any combination with *Toprac*, *Sato* and the acknowledged prior art.

For reasons included those set forth above, independent claims 1, 26, 40, and 42 are not rendered obvious by the cited references. As dependent claims 2-25, 27-39, and 41 each depend from one of claims 1, 26, and 40, these claims also are not rendered obvious. Further, these dependent claims recite many limitations that also are not rendered obvious for reasons in addition to those discussed above with respect to the independent claims. Applicants therefore respectfully request that the rejection with respect to claims 1-42 be withdrawn.

III. Amendment to the Claims

Unless otherwise specified, amendments to the claims are made for purposes of clarity, and are not intended to alter the scope of the claims or limit any equivalents thereof. The amendments are supported by the specification and do not add new matter to the specification.

IV. Conclusion

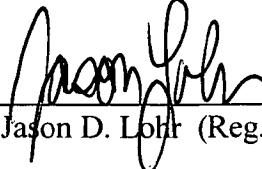
In view of the above, it is respectfully submitted that the application is now in condition for allowance. Reconsideration of the pending claims and a notice of allowance is respectfully requested.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-1703, under Order No. TWI-31000. **A duplicate copy of the transmittal cover sheet attached to this Response to Final Office Action Mailed March 17, 2004, is provided herewith.**

Respectfully submitted,

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Dated: May 14, 2004

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Atty Docket No.: TWI-31000